Application No.: 10/522,059 MAT-8640US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No:

10/522,059

MAT-8640US

Applicant: Filed: Jun Shinozaki et al. January 20, 2005

Title:

METHOD OF MANUFACTURING

PLASMA DISPLAY PANELS

T.C./A.U.: 1792 Examiner: Rakesh Kumar Dhingra

Confirmation No.: 1894 Docket No.: MAT-

1894

INTERVIEW SUMMARY

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Applicants acknowledge with thanks the courtesy extended to their representative by

Examiner Dhingra during the telephone interview of August 7, 2009.

During the course of the interview, Applicants' representative explained the following:

- 1) On July 13, 2009, an amendment was fax filed with the USPTO. The amendment included formality errors.
- 2) On July 13, 2008, a second amendment was fax filed with the USPTO. The second amendment corrected the formality errors that appeared in the first amendment.
- 3) The IFW shows a copy of the first fax filed amendment. The second fax filed amendment does not appear in the IFW.
- 4) A copy of the second amendment fax filed on July 13, 2009 is enclosed with this interview summary.

Application No.: 10/522,059

5) The Examiner is respectfully requested to enter the second amendment that was fax filed on July 13, 2009, a copy of which is enclosed with this Interview Summary. Examination should occur on the copy of the amendment that is enclosed with this Interview Summary.

Respectfully submitted,

Lawrence E. Ashery, Reg. No. 34,515 Attorney for Applicants

LEA/dmw

Enclosure: Copy/Amendment

Dated: August 10, 2009

P.O. Box 980 Valley Forge, PA 19482 (610) 407-0700

495109



Suite 301, One Westlakes, Berwyn P.O. Box 980 Valley Forge, PA 19482-0980 Phone: 610-407-0700 Fax: 610-407-0701

July 13, 2009

DATE:

Nemours Building 1007 Orange Street, Suite 1100 P.O. Box 1596 Wilmington, DE 19899 Phone: 302-778-2500 Fax: 302-778-2600 www.ratnerprestia.com Suite 265
Commerce Corporate Center
5100 Tilghman Street
Allentown, PA 18104
Phone: 610-530-8100
Fax: 610-530-8200

FAX FILING IN U.S. PATENT & TRADEMARK OFFICE

TIMF:

TO:	USPTO	FAX NO.:	1-571-273-2885			
FROM:	Lawrence E. Ashery	ADMIN. ASST.:	Donna M. Wellings			
APPLN. NO.:	10/522,059	ATTY. DOCKET NO.:	MAT-8640US			
TITLE OF APPLN.:	METHOD OF MANUFACTURING PLASMA DISPLAY PANELS					
FILING DATE:	January 20, 2005	ART UNIT:	1792			
FIRST INVENTOR:	Jun Shinozaki, et al.	CONF. NO.:	1894			
TITLE OF DOCUMENT (and List of Attachments): Amendment						
Transmittal Form - Amendment						
Total Number of Pages: $\underline{\mathscr{G}}$ (including this form)						
COMMENTS						
			į			

CONFIDENTIAL AND PRIVILEGED ATTORNEY/CLIENT INFORMATION

This facsimile transmission (and/or documents accompanying it) may contain attorney/client privileged communications and confidential business information that is intended for use only by the individual or company to whom it is addressed. Disclosure, interception, copying or any other use of this transmission by anyone other than any intended recipient is prohibited. If you receive this transmission by mistake, please notify the sender.

Please notify us immediately if you have not received the number of pages indicated above.

PTOSB21 (1962008).
Approved for use through 10/31/2008. ONB 0651-0031.
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF CHMMERCE.
Under the Paperwork Reduction Act of 1996, no persons are required to respond to a collection of information unless tipolays avail of Mice control and

TRANSMITTAL FORM		Application Number	10/522,059			
		Filing Date	January 20, 2005			
		First Named Inventor	Jun Shinozaki, et at.			
(to be used for all correspondence after initial filing)		Art Unit	1792			
		Examiner Name	Rakesh Kumar Dhingra			
Total Number of Pages in This Submission		Attorney Docket No.	MAT-8640US			
ENCLOSURES (Check all that apply)						
Fee Transmittal Form Fee Attached Amendmont/Reply After Final	Petitio	ing-related Papers	After Allowance Communication to TC Appeal Communication to Board of Appeals and Interferences Appeal Communication to TC			
Affidavits/Declaration(s) Extension of Time Request	Provisional Application Power of Attorney, Revocation, Change of Correspondence Address Terminal Disclaimer		(Appeal Notice, Brief, Reply Brief) Proprietary Information			
Express Abandonment Request			Status Letter Other Enclosure(s) (please			
Information Disclosure Statement Certified Copy of Priority Document(s)	CD, N	st for Refund umber of CD(s) andscape Table on CD	identify below):			
Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53	Remarks:		CON			
SIGNATURE OF APPLICANT, ATTORNEY OR AGENT						
Firm Name RatyarPrestia Signature Muneran C. Che						
Printed Name Lawrence E. Ashery						
Date July 13, 2009 Registration No. 34,515						
CERTIFICATE OF TRANSMISSION						
I hereby certify that this correspondence is being facsimile transmitted to the LISPTO on the date shown below:						
Signature E Claren						
Typed or Printed Name Lawrence E. Ashery Date July 13, 2009						

This collection of information is required by 37 CFR 1.5. The information is perfected to obtain or retain a benefit by the public which is to fire fant by the USFTO to process) an application. Confidentiality is governed by 38 U.S.C. 102 and 37 CFR 1.11 and 1.14. This collection is estimated to take 2 hours to complete, including applienting, propagaring, and issensifiely the completed application from the USFTO I Time will vary desponding upon the information of the USFTO I Time will vary desponding upon the information of the USFTO I Time will vary desponding upon the information of the USFTO I Time will vary desponding upon the information of the USFTO I Time will vary desponding upon the information of the USFTO I Time will vary desponding upon the information of the USFTO I Time will vary desponding upon the information of the USFTO I Time ADDRESS, SEMD IOT: Commissioner for Patients, P.O. 00. to 190, Abstraction, V.A. 2013-1450. DO NOT SEND FEES OR COMPLETED FORMS TO TIME ADDRESS, SEMD IOT: Commissioner for Patients, P.O. 00. to 190, Abstraction, V.A. 2013-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Application No.: 10/522,059

Amendment Dated July 13, 2009 Reply to Office Action of March 13, 2009

Reply to Office Action of March 13, 2009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: 10/522,059

Applicants: Jun Shinozaki et al.

Filed: January 20, 2005

Title: METHOD OF MANUFACTURING

PLASMA DISPLAY PANELS

T.C./A.U.: 1792

Examiner: Rakesh Kumar Dhingra

Confirmation No.: 1894

Docket No.: MAT-8640US



MAT-8640US

AMENDMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

above-identified application as follows: П Amendments to the Specification begin on page of this paper. X Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper. П Amendments to the Drawings begin on page of this paper and include an attached replacement sheet(s). Amendments to the Abstract are on page of this paper. A clean of this paper. version of the Abstract is on page X Remarks/Arguments begin on page of this paper.

Responsive to the Office Action dated March 13, 2009, please amend the

MAT-8640US

Application No.: 10/522,059 Amendment Dated July 13, 2009 Reply to Office Action of March 13, 2009

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

 (Currently Amended) A method of manufacturing a plasma display panel, the method comprising the steps of:

providing a substrate holder above a source of deposition material, the substrate holder including:

a first frame for holding a substrate of the plasma display panel, said first frame holding the substrate has a protrusion extending from below a bottom surface of the substrate along a side surface of the substrate to a height above the substrate and greater than a height of the substrate without being superimposed over the top surface of the substrate; and

a second frame having an opening, the protrusion between the substrate and the opening so that the substrate is on one side of the protrusion and the opening is on the other side of the protrusion and an unobstructed path exists from said source of deposition material to a top surface of said substrate;

providing the plasma display panel which is held by the substrate holder for deposition;

spraying a<u>—said</u> deposition material onto said plasma—display panel<u>bottom surface of said substrate</u> from below the substrate;

and permitting an additional amount of said deposition material to flow through said opening from below the substrate.

 (Previously Presented) The method of manufacturing a plasma display panel as defined in Claim 1, wherein a height of the protrusion is between 1 mm and 100 mm.



- 3. (Previously Presented) The method of manufacturing a plasma display panel as defined in Claim 1, the first frame comprising holding means including support means for supporting the substrate from underneath and positioning means for positioning the substrate in a planar direction, wherein the substrate is held by fitting the substrate to the positioning means and placing the substrate on the support means.
- 4. (Currently Amended) A substrate holder system for a plasma display panel, the substrate holder system comprising:
- a first frame for holding a substrate of the plasma display panel, said first frame being provided with a protrusion extending from below a bottom surface of the substrate along a side surface of the substrate to a height above the substrate greater than a height of the substrate without being superimposed over the top surface of the substrate.
- a second frame having an opening, the protrusion between the substrate and the opening so that the substrate is on one side of the protrusion and the opening is on the other side of the protrusion;

and a source of deposition material below said substrate which sprays said deposition material towards the bottom surface of the substrate and through the opening;

wherein an unobstructed path exists from said source of deposition material to a top surface of said substrate.

- (Previously Presented) The substrate holder system for a plasma display panel as defined in Claim 4, wherein a height of the protrusion is between 1 mm and 100 mm.
- 6. (Previously Presented) The substrate holder system for a plasma display panel as defined in Claim 4, the first frame comprising holding means including support means for supporting the substrate from underneath and positioning means for positioning the substrate in a planar direction, wherein the substrate is held by

fitting the substrate to the positioning means and placing the substrate on the support means.

- 7. (Previously Presented) The substrate holder system for a plasma display panel as defined in Claim 4, wherein the first frame includes a plurality of supports separated from each other which extend below the bottom surface of the substrate.
- (Previously Presented) The substrate holder system for a plasma display panel as defined in Claim 4, said second frame maintained with said opening while said substrate is situated in said first frame.
- (Previously Presented) A method of manufacturing a plasma display panel as defined in Claim 1, wherein the protrusion curves away from the substrate.



Remarks/Arguments:

Claims 1, 2, 4, 5, and 8 have been rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art in view of Yamazaki (US 2002/0132047) and Spahn (US 6,237,529). It is respectfully submitted, however, that these claims are patentable over the art of record for the reasons set forth below.

Page 9, line 25 of Applicants' specification explains that generated vapor flow 38e is deposited on the surface of substrate 13. Applicants' Fig. 2 shows that the vapor flow forms protective layer 18 on the bottom of the substrate.

Page 11, line 11 of Applicants' specification states:

...a proportion of the deposition material passing through opening 4 of substrate holder 1 reaches and deposits on non-deposition face 13b of substrate 13. However, protrusion 5...suppresses this phenomenon.

Thus, Applicants' claim 1 now recites the feature of:

...an unobstructed path exists from said source of deposition material to a top surface of said substrate...

Yamazaki was cited in the outstanding office action as teaching a protrusion that extends to a height above Yamazaki's substrate. This protrusion appears in Fig. 1 of Yamazaki. This protrusion, however, creates an obstruction between his source of deposition material and the top surface of his substrate. Thus, one of ordinary skill in the art would not rely on Yamazaki to obtain Applicants' claim 1.

Spahn was also cited in the outstanding office action as teaching a protrusion that extends to a height above Spahn's substrate. Applicants respectfully disagree as Fig. 4 of Spahn appears to show protrusions that extend only below his substrate (i.e. not above). In addition, Spahn's protrusions 104 create obstructions between his source of deposition material and the top surface of his substrate. Thus, one of ordinary skill in the art would not rely on Spahn to obtain Applicants' claim 1.



Applicants' admitted prior art lacks any teaching of Applicants' claimed protrusion. That is why the rejection attempted to combine the admitted prior art with other references.

Accordingly, the combination of references cited in the outstanding office action neither discloses nor suggests Applicants' claim 1. Withdrawal of the rejection is respectfully requested.

Claim 4, while not identical to claim 1 is also patentable over the art of record for reasons similar to those set forth above with regard to claim 1.

Claims 2, 5 and 8 are patentable by virtue of the dependency on allowable claims 1 and 4.

In view of the arguments set forth above, allowance of claims 1, 2, 4, 5, and 8 is respectfully requested.

Claims 3, 6, 7 and 9 have been rejected under 35 U.S.C. 103(a) by combining applicants' admitted prior art, Yamazaki, and Spahn with other references of record. These claims, however, are patentable by virtue of their dependency on allowable independent claims.

In view of the amendments and arguments set forth above, this application is

COPL MAT-8640US

Application No.: 10/522,059 Amendment Dated July 13, 2009 Reply to Office Action of March 13, 2009

in condition for allowance which action is respectfully requested.

Respectfully submitted,

Lawrence E. Ashery, Reg. No. 34,515 Attorney for Applicants

LEA/dmw

Dated: July 13, 2009

P.O. Box 980

Valley Forge, PA 19482 (610) 407-0700

NH420789

The Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. 18-0350 of any fees associated

with this communication.

I hereby certify that this correspondence is being facsimile transmitted to the Unites States Patent and Trademark Office on July 13, 2009.

Lawrence E. Ashery, Reg. No. 34,515